

Amendments to the Claims

and

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1 and 10 are amended.

1. (CURRENTLY AMENDED) A method of manufacturing a semiconductor device in patterning of a conductive film and a thin dielectric film, comprising the steps of:

a first etching step of carrying out anisotropic etching until most of the conductive film in a flat portion disappears, the first etching step using a mixed gas including O₂; and

a second etching step of increasing a selective ratio to the dielectric film, by increasing the flow ratio of O₂, to etch the conductive film in an unnecessary portion in a state in which the conductive film is caused to remain such that a thickness of the dielectric film provided under the grain boundary can be held to prevent oxidation species from reaching an interface with a substrate after the first etching step.

2. (ORIGINAL) The method of manufacturing a semiconductor device according to claim 1, wherein the second etching step includes a step of carrying out etching while growing a silicon oxide film by a reaction of the oxidation species and the substrate.

3. (PREVIOUSLY PRESENTED) The method of manufacturing a semiconductor device according to claim 1, wherein the second etching step is executed in such a gas atmosphere that a concentration of the oxidation species is higher than that in the first etching step.

4. (PREVIOUSLY PRESENTED) The method of manufacturing a semiconductor device according to claim 1, wherein the second etching step is executed at an in-chamber pressure of 2 mTorr or less.
5. (ORIGINAL) The method of manufacturing a semiconductor device according to claim 1, wherein the dielectric film is a silicon oxide film having a thickness of 5 nm or less.
6. (PREVIOUSLY PRESENTED) The method of manufacturing a semiconductor device according to claim 1, wherein the conductive film is a silicon type conductive film.
7. (ORIGINAL) The method of manufacturing a semiconductor device according to claim 6, wherein the silicon type conductive film is a polycrystalline silicon film.
8. (PREVIOUSLY PRESENTED) The method of manufacturing a semiconductor device according to claim 1, wherein the first and second etching steps are ECR plasma etching steps.
9. (ORIGINAL) The method of manufacturing a semiconductor device according to claim 6, wherein the second etching step uses a hydrogen bromide (HBr)/Cl₂/O₂ plasma.
10. (CURRENTLY AMENDED) The method of manufacturing a semiconductor device according to claim 9, wherein the first etching step uses the hydrogen bromide (HBr)/Cl₂/O₂ plasma, ~~and~~
~~a concentration of oxygen in the second etching step is higher than that of oxygen in the first etching step.~~
11. (ORIGINAL) The method of manufacturing a semiconductor device according to claim 9, wherein the first etching step uses a Cl₂/O₂ plasma.

12. (PREVIOUSLY PRESENTED) The method of manufacturing a semiconductor device according to claim 1, wherein the dielectric film is a gate oxide film and the conductive film is a gate electrode.